NASA/OR- 47- 207179

FINIL 711-35-12

2/19/98

## NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

## NASA/NAGW-4825

## FINAL REPORT

Construction and Operation of 1-5 Micron Array Camera (Minne-Cam) for the University of Minnesota Observatories

Robert D. Gehrz, Principal Investigator
Department of Astronomy
University of Minnesota
116 Church St. SE
Minneapolis, MN 55455
Telephone: 612-624-7806
E-Mail: gehrz@astro.spa.umn.edu

The 1-5 Micron Imaging Infrared (IR) Camera (MinneCam) for the University of Minnesota (UM) observatories has been constructed. It is presently housed at the Mt. Lemmon Observing Facility (MLOF) in Arizona for its inaugural observing run. MinneCam is testing and comparing various observational approaches, and will produce data sets that can be used to define and test data analysis algorithms.

The camera is being used in support of studies to define strategies for using NASA's Space Infrared Telescope Facility (SIRTF) for observations of comets and other targets of opportunity. A long-term goal is to modify the instrument to accommodate imaging polarimetry. This instrument is presently putting the University of Minnesota observatories in competition with other major IR observatories and is allowing us to development state-of-the-art instrumentation for the UofM's proposed 2.4 meter telescope proposed jointly with NOAO and the University of Colorado.

The camera has provided important research opportunities for the Minnesota IR group, including other faculty and graduate students in the Department of Astronomy.